

REMARKS/ARGUMENTS

This Amendment is being filed in response to the Office Action dated May 4, 2007. Reconsideration and allowance of the application in view of the amendments made above and the remarks to follow are respectfully requested.

Claims 1-27 are currently pending in the Application. Claims 1, 8, 23 and 26 are independent claims.

In the Office Action, claims 1-27 are rejected under 35 U.S.C. §102(b) as anticipated by U.S. Patent No. 5,947,905 to Hadjicostis ("Hadjicostis"). It is respectfully submitted that claims 1-27 are allowable over Hadjicostis for at least the following reasons.

Hadjicostis shows a flexible coaxial cable extension wherein an ultrasound array 30 is positioned on a distal end of the flexible coaxial cable extension (see, FIG. 1 and accompanying description col. 4, lines 53-56). Hadjicostis also shows and integrated circuit 40 that is also positioned along the flexible coaxial cable extension proximate to the ultrasound array. FIGs. 4 through 8 show different cross sections of the flexible coaxial cable extension including round cross sections and cross sections with bent and straight portions. However, each section shown has the ultrasound array following distal to the integrated circuit

along the flexible coaxial cable extension (with reference to a connection end of the flexible coaxial cable extension that is not shown in the figures).

It is respectfully submitted that the ultrasonic transducer of Claim 1 is not anticipated or made obvious by the teachings of Hadjicostis. For example, Hadjicostis does not disclose or suggest, an ultrasonic transducer that amongst other patentable elements, comprises (illustrative emphasis provided) "a housing; acoustic elements arranged in said housing; an integrated circuit arranged in said housing adjacent said acoustic elements; first connection means for connecting said acoustic elements to said integrated circuit; and second connection means for connecting said integrated circuit to electrical transmission lines, connection sites for said first and second connection means and said acoustic elements being arranged on a common surface of said integrated circuit" as recited in Claim 1 and as substantially recited in claim 23.

It is also respectfully submitted that Hadjicostis does not disclose or suggest, an ultrasonic transducer that amongst other patentable elements, comprises (illustrative emphasis added) "a flexible circuit bent at least partially around said body such that

a first portion of said flexible circuit extends in a first direction along said flexible circuit's length and a second portion of said flexible circuit extends in a second direction along said flexible circuit's length that is at least perpendicular to said first direction" as recited in Claim 8. While the acoustic array backing 100 (see, FIG. 1 and 7) may be viewed as a body, and a section of the flexible circuit extends along a section of the backing, this is not sufficient to meet the limitations of claim 8. Further, it is respectfully submitted that Hadjicostis does not disclose or suggest, a method for manufacturing an ultrasonic transducer that amongst other patentable elements, comprises (illustrative emphasis added) "arranging an acoustic assembly on a flexible circuit that extends along a first axis; ... and bending the flexible circuit at least partially around a thermally-conductive body to form at least one 180° bend about the body with the acoustic assembly being spaced from the electronic components along a second axis that extends substantially perpendicular to the first axis" as recited in Claim 26.

Based on the foregoing, the Applicants respectfully submit that independent Claims 1, 8, 23 and 26 are patentable over Hadjicostis and notice to this effect is earnestly solicited.

Claims 2-7, 9-22, 24-25 and 27 respectively depend from one of Claims 1, 8, 23 and 26 and accordingly are allowable for at least this reason as well as for the separately patentable elements contained in each of the claims.

For example, it is respectfully submitted that Hadjicostis does not disclose or suggest (illustrative emphasis added):

"wherein said second connection means comprise an intermediate interconnection substrate comprising a semi-rigid circuit comprising flexible and rigid circuit portions" as recited in claim 5;

"wherein said interconnection substrate is bent such that a vertical size of an assembly of said acoustic elements, said integrated circuit and said interconnection substrate is less than seventy-five percent of a horizontal length of said integrated circuit and such that a first portion of said interconnection substrate extends in a first direction along a length of said second connection means and a second portion of said interconnection substrate extends in a second direction along said length of said second connection means at an angle that is at least perpendicular to said first direction" as recited in claim 6;

"wherein said body defines a cavity, said second portion of said electronic components being arranged on said flexible circuit and in said cavity" as recited in claim 12 and as substantially recited in claim 27; or

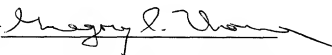
"wherein said flexible circuit has a 180° bend around said body such that said first portion of said flexible circuit is arranged on a first side of said body and said second portion of said flexible circuit is arranged on a second side of said body opposite said first side of said body and wherein said first direction extends in an opposite direction of said second direction" as recited in claim 13.

It is respectfully submitted that further dependent claims recite similar and/or other patentably distinct features. Accordingly, separate consideration of each of the dependent claims is respectfully requested.

In addition, Applicants deny any statement, position or averment of the Examiner that is not specifically addressed by the foregoing argument and response. Any rejections and/or points of argument not addressed would appear to be moot in view of the presented remarks. However, the Applicants reserve the right to submit further arguments in support of the above stated position, should that become necessary. No arguments are waived and none of the Examiner's statements are conceded.

Applicants have made a diligent and sincere effort to place this application in condition for immediate allowance and notice to this effect is earnestly solicited.

Respectfully submitted,

By 

Gregory L. Thorne, Reg. 39,398  
Attorney for Applicant(s)  
July 26, 2007

**THORNE & HALAJIAN, LLP**  
Applied Technology Center  
111 West Main Street  
Bay Shore, NY 11706  
Tel: (631) 665-5139  
Fax: (631) 665-5101